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10/507,520	04/06/2005	Hitoshi Onizawa	056205.55398US	1159

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1001 Pennsylvania Avenue NW
Washington, DC 20004-2595

EXAMINER

SHECHTMAN, SEAN P

ART UNIT	PAPER NUMBER
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2121

MAIL DATE	DELIVERY MODE
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12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,520	Applicant(s) ONIZAWA ET AL.	
	Examiner Sean P. Shechtman	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,10 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,10 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: Referring to page 24, paragraph 4 – page 25, paragraph 1, and page 27, paragraph 2, the difference between the number of vehicles successively arranged and the successive building sequence is unclear. Referring to, for example, pages 2-7, it is unclear how a point can contain a building sequence to be propagated and furthermore it is unclear how preceding and succeeding processes would accept or receive such propagated sequence. Referring to, for example, page 18, "the initial lead-time developing unit 34 shifts a lead time for modification based on the initial array sequence prepared by the initial offline sequence preparing unit 33, and develops the sequence to preceding and succeeding target processes for which the sequence is to be prepared" is unclear.

Claim Objections

2. Claim 1 is objected to because of the following informalities: Referring to claim 1, paragraph 7, "inputting said input unit" should be "input to said input unit". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 4, 5, 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 4, 5, 13, have been amended to recite “an initial lead-time developing unit for developing the building sequence to preceding and succeeding processes by a lead-time shifting for the automobile production line”. The specification teaches an initial lead-time developing unit for developing the building sequence to preceding and succeeding processes by a lead-time shifting for the automobile production line, however the specification is completely silent in teaching how one of ordinary skill in the art would developing the building sequence to preceding and succeeding processes or how one of ordinary skill in the art would developing the building sequence to preceding and succeeding processes by a lead-time shifting. There is no teaching in the original disclosure that can explain, in anyway, how one of ordinary skill in the art could develop a building sequence to preceding and succeeding processes or how one of ordinary skill in the art could develop a building sequence to preceding and succeeding processes by a lead-time shifting. There is no ordinary meaning that provides a sequence with the ability to be developed to preceding and succeeding processes. Therefore, the claim(s) contains subject matter which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. Claims 1, 4, 5, 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 4, 5, 13, recite that the building sequence is in or at a point or that the building sequence is in or at a point in the automobile production line between two processes in the automobile production line (see for example claim 1, paragraphs 10 and 13). The specification teaches a processing unit prepares a building sequence, however the specification is silent in providing how one of ordinary skill in the art would provide the building sequence inside or at a point of a manufacturing line, nor does the specification provide for a processing unit inside or at any point of a manufacturing line. There is no teaching in the original disclosure that can explain, in anyway, how one of ordinary skill in the art could place a building sequence in or at a point in the automobile production line, or how one of ordinary skill in the art would determine how to place a building sequence in or at a point in the automobile production line. There is no ordinary meaning that provides a point with the ability to provide a building sequence inside or at it. Therefore, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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5. Claims 1, 4, 5, 13, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1, 4, 5, 13, recite propagating the building sequence from inside or at a point to preceding and succeeding processes. The specification teaches a processing unit appears to be connected to another device by way of a LAN device of the input/output units (See Fig. 1 of the instant specification). However the specification is completely silent in teaching how or where one of ordinary skill in the art would propagate the building sequence from inside a point to preceding and succeeding processes, nor does the specification provide for how preceding and succeeding processes would accept or receive such propagated sequence. There is no ordinary meaning that provides a point with the ability to provide a building sequence to be propagated. A process, in view of one of ordinary skill in the art is one or more steps, and there is no ordinary meaning that provides a process with the ability to accept/receive such propagated sequence, particularly in light of the fact that a process is not an apparatus and therefore is not able to receive data. Therefore, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 4, 5, 13, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the automobile" in paragraph 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the offline point" in paragraph 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the building sequence for the mixture line" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the building sequence for the mixture line, which is prepared by said initial lead-time development unit" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the points where the lead-time shifting has been done" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

The term "where the lead-time shifting has been done" in claims 1, 13 is a relative term which renders the claim indefinite. The term "where the lead-time shifting has been done " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. There is only one point recited in the claims that appears to use "lead-time shifting", therefore the points have

been rendered indefinite by the use of the term "where lead-time shifting has been done".

Claim 13 recites the limitation "the automobile" in paragraph 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "said offline sequence preparing unit" in paragraph 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the building sequence for the mixture line" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the points where the lead-time shifting has been done" in the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

Referring to claim 1, paragraph 8, it is unclear how a building sequence is developed to preceding and succeeding processes by a lead-time shifting. Claim 13 contains the same or corresponding limitations and is therefore indefinite for the same reasons.

Referring to claim 1, paragraph 8, it is unclear what is prepared by the initial vehicle building sequence,- the building sequence, a lead-time shifting, the automobile production line? Claim 13 contains the same or corresponding limitations and is therefore indefinite for the same reasons.

Referring to claim 1, paragraph 8, it is unclear what is prepared by said initial offline sequence preparing unit,- the building sequence, a lead-time shifting, the

automobile production line, the initial vehicle building sequence? Claim 13 contains the same or corresponding limitations and is therefore indefinite for the same reasons.

Referring to claim 1, paragraph 9 recites the limitation “the building sequence”, however paragraphs 1-8 recites the limitations of “an optimum building sequence”, and “an initial vehicle building sequence”. Therefore the recitation of “the building sequence” in the same or subsequent claim is unclear because it is uncertain which of the building sequences was intended (MPEP 2173.05(e)). Claim 13 contains the same or corresponding limitations and is therefore indefinite for the same reasons.

Referring to claim 1, paragraphs 11-14 recites the limitation “the building sequence”, however paragraphs 1-10 recites the limitations of “an optimum building sequence”, “an initial vehicle building sequence”, and “another pattern of the vehicle building sequence”. Therefore the recitation of “the building sequence” in the same or subsequent claim is unclear because it is uncertain which of the building sequences was intended (MPEP 2173.05(e)). Claim 13 contains the same or corresponding limitations and is therefore indefinite for the same reasons.

Referring to claims 1, 13, it is unclear what is “as a penalty value” or what is “in accordance with restriction conditions”.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The term “process” in claims 1, 4, 5, 13 is used by the claim to mean “something which accepts or receives the building sequence”, while the accepted meaning is “one or more steps.” The term is indefinite because the specification does not clearly redefine the term.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term “point” in claims 1, 4, 5, 13 is used by the claim to mean “something which contains or has at it, the building sequence to be propagated”, while the accepted meaning is “an area”, respectively. The term is indefinite because the specification does not clearly redefine the term.

Due to the number of 35 USC § 112 rejections, the examiner has provided a number of examples of the claim deficiencies in the above rejections, however, the list of rejections may not be all inclusive. Applicant should refer to these rejections as examples of deficiencies and should make all the necessary corrections to eliminate the 35 USC § 112 problems and place the claims in proper format. Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 4, 5, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 19902056 to Daferner, translated into English (hereinafter referred to as Daferner).

Referring to claims 1, 13, Daferner teaches, a building sequence planning system/method for an automobile production line:

an input unit for inputting vehicle information of vehicles to be manufactured (page 20, paragraph 4; Page 10, paragraph 5), a processing unit for deciding an optimum building sequence based on the vehicle information inputted through said input unit (Page 20, paragraph 5), and an output unit for externally outputting a building sequence schedule decided by said processing unit (Page 21, paragraph 1),

wherein said automobile production line is a mixed line including a first line and a second line respectively in parallel, and a third line branching from said first line and joining with said first line or said second line (figure 3 and page 9, paragraph 20 – page 10, paragraph 23; Figs. 9-20, pages 19-28),

wherein said processing unit includes

an initial offline sequence preparing unit for preparing an initial vehicle building sequence of the automobile based on the vehicle information inputting said input unit, an initial lead-time developing unit for developing the building sequence to preceding and succeeding processes by lead-time shifting for the automobile production line prepared by the initial vehicle building sequence prepared by said initial offline sequence preparing unit, a sequence evaluating unit for evaluating the building

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sequence based on conditions of an occupancy rate level, a minimum interval vehicle number, a maximum succeeding vehicle number, and a lot condition, as a penalty value, in accordance with restriction conditions, an offline point sequence preparing unit for preparing another pattern of the vehicle building sequence at the offline point, an evaluation determining and storing unit for deciding a building sequence with a minimum penalty based on the penalty value evaluated by said sequence evaluation unit; wherein said sequence evaluating unit evaluates the building sequence for the mixture line, which is prepared by said initial lead-time developing unit, as a penalty value based on a sum of satisfying degrees, at all the points where the lead-time shifting has been done (Page 19, paragraph 3 – Page 20, paragraph 1),

a lead-time developing unit for developing the building sequence at the offline point for another pattern of the vehicle building sequence prepared by said offline sequence preparing unit by using a lead-time shifting by employing the number of vehicles residing or accumulated between two processes, and wherein said processing unit propagates the building sequence in a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting by employing the number of vehicles residing or accumulated between two processes, thereby deciding an optimum building sequence for each of the preceding and succeeding processes (Page 13, paragraph 1; Page 11, paragraph 2, shifting of orders 3, 4, 5 for air conditioning assembly team to be at least 50 clock cycles apart,

thereby shifting the time for which the processing of orders 3, 4, 5 will be completed thereby shifting the lead-time).

4. A building sequence planning system for an automobile production line according to Claim 1, wherein, in a mixed line including branches and joints (Page 10, paragraph 6 – Page 11, paragraph 1), said lead-time developing unit calculates a different lead time for each vehicle by employing the number of vehicles residing or accumulated between two processes, and propagates the building sequence to preceding and succeeding processes with lead-time shifting, thereby deciding the building sequence for each of the preceding and succeeding processes (Page 13, paragraph 1; Page 11, paragraph 2, shifting of orders 3, 4, 5 for air conditioning assembly team to be at least 50 clock cycles apart).

5. A building sequence planning system for an automobile production line according to Claim 4, wherein, for a vehicle which has to pass a line twice because of work for two-tone color painting, the lead time is modified by adding a time or the number of vehicles (Page 15, paragraph 2).

8. Claims 1, 4, 5, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,546,302 to Bergeon (hereinafter referred to as Bergeon).

Referring to claims 1, 13, Bergeon teaches a building sequence planning system/method for an automobile production line, said system/method comprising:

an input unit for inputting vehicle information of vehicles to be manufactured (Col. 2, lines 55-62), a processing unit for deciding an optimum building sequence based on

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the vehicle information inputted through said input unit (Col. 2, lines 62- Col. 3, lines 45), and an output unit for externally outputting a building sequence schedule decided by said processing unit (Col. 3, lines 15-32),

wherein said automobile production line is a mixed line including a first line and a second line respectively in parallel, and a third line branching from said first line and joining with said first line or said second line (Cols. 1-8),

wherein said processing unit includes

an initial offline sequence preparing unit for preparing an initial vehicle building sequence of the automobile based on the vehicle information inputting said input unit (Col. 3, lines 3-14), an initial lead-time developing unit for developing the building sequence to preceding and succeeding processes by lead-time shifting for the automobile production line prepared by the initial vehicle building sequence prepared by said initial offline sequence preparing unit (Col. 3, lines 3-14), a sequence evaluating unit for evaluating the building sequence based on conditions of an occupancy rate level, a minimum interval vehicle number, a maximum succeeding vehicle number, and a lot condition (Col. 3, lines 19-23), as a penalty value, in accordance with restriction conditions (Col. 5, line 48 – Col. 6, line 6), an offline point sequence preparing unit for preparing another pattern of the vehicle building sequence in an offline process (Col. 5, line 48 – Col. 6, line 6), an evaluation determining and storing unit for deciding a building sequence with a minimum penalty based on the penalty value evaluated by said sequence evaluation unit, wherein said sequence evaluating unit evaluates the building sequence for the mixture line, which is prepared by said initial lead-time

developing unit, as a penalty value based on a sum of satisfying degrees, at all the points where the lead-time shifting has been done (Col. 5, line 48 – Col. 6, line 6).

wherein said processing unit prepares a vehicle building sequence, determines a degree of dissatisfaction of the prepared building sequence, as a penalty value, in accordance with restriction conditions which are inputted through said input unit and are imposed when building the vehicles into work (Col. 2, lines 48-65; Fig. 2, element 44; Col. 5, lines 47 – Col. 6, line 6), the restriction conditions including leveling in distribution of vehicles having the same specifications, a minimum building interval of vehicles having particular specifications, and a maximum succeeding vehicle number and a minimum succeeding vehicle number in successive building of the vehicles when the number of vehicles successively loaded is taken into consideration (Col. 3, lines 19-23), and decides a building sequence with a minimum penalty by preparing a plurality of building sequences and determining the penalty value for each building sequence with respect to the restriction conditions (Col. 5, line 48 – Col. 6, line 6), and

a lead-time developing unit for developing the building sequence at the offline point for another pattern of the vehicle building sequence prepared by said offline sequence preparing unit by using a lead-time shifting by employing the number of vehicles residing or accumulated between two processes, and wherein said processing unit propagates the building sequence in a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting by employing the number of vehicles residing or accumulated between two

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processes, thereby deciding an optimum building sequence for each of the preceding and succeeding processes (Col. 5, line 48 – Col. 6, line 6).

The examiner respectfully submits that the swapping of vehicles in the sequence (Col. 5, lines 48 – Col. 6, line 6) would thereby shift the time for which the processing of these vehicles will be completed which would thereby shift the lead-time is lead-time shifting. The examiner respectfully submits that the swapping of vehicles in the sequence (Col. 5, lines 48 – Col. 6, line 6), wherein the sequence is of different procedures dependent upon the characteristics, options, and accessories of the vehicles (Col. 1, lines 14-28), wherein the sequence takes into account the number of vehicles without a specific option which are disposed between two vehicles containing that option (Col. 4, lines 19-22), wherein the generated sequences or schedules are communicated to the plant for most effective sequencing and scheduling (Col. 6, lines 7-14), is a lead-time developing unit for developing the building sequence at the offline point for another pattern of the vehicle building sequence prepared by said offline sequence preparing unit by using a lead-time shifting by employing the number of vehicles residing or accumulated between two processes, and wherein said processing unit propagates the building sequence in a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting by employing the number of vehicles residing or accumulated between two processes, thereby deciding an optimum building sequence for each of the preceding and succeeding processes.

4. A building sequence planning system for an automobile production line according to Claim 1, wherein, in a mixed line including branches and joints, said lead-time developing unit calculates a different lead time for each vehicle by employing the number of vehicles residing or accumulated between two processes, and propagates the building sequence to preceding and succeeding processes with lead-time shifting, thereby deciding the building sequence for each of the preceding and succeeding processes (Col. 4, lines 19-26; Col. 5, lines 13-46).

5. A building sequence planning system for an automobile production line according to Claim 4, wherein, for a vehicle which has to pass a line twice because of work for two-tone color painting, the lead time is modified by adding a time or the number of vehicles (Col. 4, lines 19-26; Col. 5, lines 13-46).

Response to Arguments

9. Applicant's arguments filed 12/1/08 have been fully considered but they are not persuasive.

Applicant submits that the specification complies with the requirements of 35 U.S.C. 112, first paragraph and that one skilled in automotive production line planning would not consider the terms identified above to be "unclear, inexact, or verbose". The examiner respectfully disagrees. The examiner respectfully submits that, referring to page 24, paragraph 4 – page 25, paragraph 1, and page 27, paragraph 2, the difference between the number of vehicles successively arranged and the successive building sequence is unclear. Furthermore, the examiner respectfully submits that, referring to, for example, pages 2-7, it is unclear how a point can contain a building sequence to be

propagated and furthermore it is unclear how preceding and succeeding processes would accept or receive such propagated sequence. Finally, while applicant argues that one skilled in automotive production line planning would not consider the terms identified above to be "unclear, inexact, or verbose", the arguments fails to show how, in view of the instant specification and the knowledge of one of ordinary skill in the art, one would differentiate between the number of vehicles successively arranged and the successive building sequence, how a point can contain a building sequence to be propagated, or how preceding and succeeding processes would accept or receive such propagated sequence.

Applicant argues that Daferner fails to teach lead-time shifting. The examiner respectfully disagrees. Lead-time shifting is broad in view of the instant disclosure and the knowledge of one of ordinary skill in the art. The examiner respectfully submits that shifting of orders 3, 4, 5 for air conditioning assembly team to be at least 50 clock cycles apart, thereby shifting the time for which the processing of orders 3, 4, 5 will be completed thereby shifting the lead-time (Page 13, paragraph 1; Page 11, paragraph 2), is lead-time shifting.

Applicant argues that Daferner fails to teach a mixed line including branches and joints. The examiner respectfully disagrees. A mixed line including branches and joints is broad in view of the instant disclosure and the knowledge of one of ordinary skill in the art. The examiner respectfully submits that figure 3 and page 9, paragraph 20 – page 10, paragraph 23, shows a mixed line including branches and joints. Furthermore, a mixed line including branches and joints is so broad that any type of difference in the

vehicles on the lines, such as vehicle type or specification (See Figs. 9-20, pages 19-28), is a mixed line including branches and joints.

Applicant argues that Bergeon fails to teach said processing unit propagates the building sequence in a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting, since Bergeon only replaces two vehicles. The examiner respectfully disagrees. The examiner respectfully submits that the swapping of vehicles in the sequence (Col. 5, lines 48 – Col. 6, line 6) would thereby shift the time for which the processing of these vehicles will be completed which would thereby shift the lead-time is lead-time shifting. The examiner respectfully submits that the swapping of vehicles in the sequence (Col. 5, lines 48 – Col. 6, line 6), wherein the sequence is of different procedures dependent upon the characteristics, options, and accessories of the vehicles (Col. 1, lines 14-28), wherein the sequence takes into account the number of vehicles without a specific option which are disposed between two vehicles containing that option (Col. 4, lines 19-22), wherein the generated sequences or schedules are communicated to the plant for most effective sequencing and scheduling (Col. 6, lines 7-14), is a lead-time developing unit for developing the building sequence at the offline point for another pattern of the vehicle building sequence prepared by said offline sequence preparing unit by using a lead-time shifting by employing the number of vehicles residing or accumulated between two processes, and wherein said processing unit propagates the building sequence in a point in the automobile production line between two processes in the automobile production line,

which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting by employing the number of vehicles residing or accumulated between two processes, thereby deciding an optimum building sequence for each of the preceding and succeeding processes.

Applicant argues that Bergeon fails to teach a mixed line including branches and joints. The examiner respectfully disagrees. The examiner respectfully submits that a mixed line including branches and joints is broad in view of the instant disclosure and the knowledge of one of ordinary skill in the art, and the examiner respectfully submits that a mixed line including branches and joints is so broad that any type of difference in the vehicles on the lines, such as vehicle type or specification (See Cols. 1-8), is a mixed line including branches and joints.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., calculating a sum of satisfying values (degrees) as a penalty value at all points where lead-time shifting has been done; more than two vehicles) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571)272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPS
Sean P. Shechtman
December 3, 2008

/Sean P. Shechtman/
Primary Examiner, Art Unit 2121